

### REMARKS/ARGUMENTS

Claims 2, 6, 9, 12, 15-16 and 21-24 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Haggerty, et al. (USPN 6,331,983) in view of Cotton, et al. (USPN 4,740,954). Claims 3-5 and 17-20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Haggerty, et al. in view of Cotton, et al. and further in view of Donahue, et al. (USPN 6,266,339). Claims 10, 11 and 14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Haggerty, et al. in view of Cotton, et al. and further in view of Adelman, et al. (USPN 6,006,259). In support, the Examiner asserts that Haggerty discloses all the limitations of the present invention except determining that the receiving host is reliably joined to the multi-cast group address if any packets are received within a designated period. Since Haggerty is silent on this issue, the Examiner now points to Cotton and asserts that the combination of these references makes obvious the invention of the present application. The Applicants, however, strongly disagree.

Regardless of how obvious it may be to combine the teachings of Haggerty and Cotton, the Applicants assert that such combination fails to teach the invention of the present application.

Each claim of the present invention recites or depends from claims that recite:

*... determining whether any packets are received within a designated time period after the step of issuing a join command; and  
if any packets are received by the first host within the designated time period, determining that the first host is joined to the multicast group address; otherwise, if any packets are not received by the first host within the designated time period, determining that the first host is not joined to the multicast group address.*

As set forth in the specification, the present invention provides for a method for the *destination host* to determine whether it has joined a multicast group address (page 4, lines 17-19). Particularly, upon receiving indicia that a host is actively sourcing packets to the multicast group address, the *destination host* issues a join command in an attempt to join the multicast group address. If the *destination host* receives a packet within a designated time period associated with the attempt, the *destination host* can verify that it has successfully joined the multicast group; otherwise, the *destination host* determines that it did not successfully join the multicast group (page 4, lines 23-27). Thus, the present invention provides for the *destination host* to detect a failed Join(s) relatively quickly (*i.e., without relying on periodic updates from the router(s) of the network*) so that, when necessary, the Join(s) may be re-accomplished to reduce

or eliminate the likelihood that the destination host will lose critical information that may be conveyed in a talkgroup or point-to-point call (page 3, lines 12-17).

In contrast to the present invention, Haggerty discloses a multicast switching method whereby the *sender* of a multicast message starts a timer upon transmission of the message and waits for acknowledgment from the receivers. If the timer expires prior to receiving an acknowledgement from a given receiver, the sender resends the message to the given receiver (col. 17, lines 39-45). Thus, Haggerty discloses how the *sender* can verify if all the receivers *that are already a part of the multicast group* received it data. Nowhere does Haggerty teach, suggest or make obvious ... *the (destination) host...determining whether any packets are received within a designated time period after the step of issuing a join command; and if any packets are received by the first host within the designated time period, determining that the first host is joined to the multicast group address; otherwise, if any packets are not received by the first host within the designated time period, determining that the first host is not joined to the multicast group address.*

The Examiner acknowledges that Haggerty fails to disclose determining that the receiving host is reliably joined to the multi-cast group address if any packets are received within a designated period, and attempts to use Cotton to fill this void. Cotton, however, discloses a multicast routing algorithm such that the network determines which hosts wish to join/leave a multicast conversation. A host that wishes to participate (join) a multicast conversation transmits packets to the multicast address, and when it wishes to stop participating (leave) the multicast conversation, the host stops transmitting packets to the multicast address. The network builds a table of hosts that wish to participate in the multicast conversation based on the packets transmitted to the multicast address within a maximum interpacket time interval, but smaller than the Maxtime. If a packet is not received from a host prior to the Maxtime, the network clears the relevant table entry corresponding to the host from the table. Thus, Cotton discloses how *the network* keeps track of hosts who wish to participate in the multicast group by adding and deleting entries into a table [see column 3, lines 10-29]. Nowhere does Cotton teach, suggest or make obvious *the host* determining whether it has successfully joined the multicast group address based on *the host* receiving packets within a designated time period.

Thus, the Applicants assert that these two references when combined would not permit one skilled in the art to produce the invention of the present application. Based upon this lack of

teaching, the Applicants assert that the cited references fail to teach the invention of the present application, for nowhere do they teach, suggest, or make obvious... *the host...determining whether any packets are received within a designated time period after the step of issuing a join command; and*

*if any packets are received by the first host within the designated time period, determining that the first host is joined to the multicast group address; otherwise, if any packets are not received by the first host within the designated time period, determining that the first host is not joined to the multicast group address.*

Since the differences between the subject matter as claimed and the cited references are so clearly significant, the Applicants assert that the subject matter as a whole would not have been obvious to one of ordinary skill in the art at the time the invention was made. In accordance, the Applicants assert that the cited references fail to teach, suggest, or make obvious the invention of the present application.

Since claims 2, 15, and 22 are believed to be allowable, all claims that depend therefrom contain the limitations of these allowable claims and merely recite additional limitations that should not preclude patentability.

Accordingly, this application is believed to be in proper form for allowance and an early Notice of Allowance is respectfully requested.

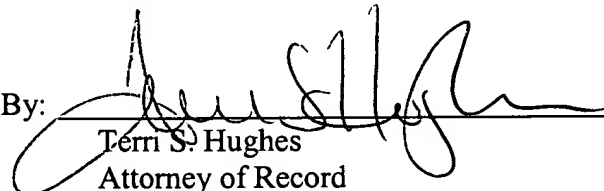
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